Moab UMTRA Project Remedial Action Contract ("Moab RAC")
Draft Performance Work Statement

C.01 MOAB PROJECT OVERVIEW AND OBJECTIVES

C.01.1 BACKGROUND

The DOE Moab Project Site is approximately 3 miles northwest of the City of Moab in Grand County, Utah, and includes the former Atlas Minerals Corporation (Atlas) uranium-ore processing facility. The site is situated on the west bank of the Colorado River at the confluence with Moab Wash. The site encompasses approximately 435 acres, of which approximately 130 acres are covered by the uranium mill tailings pile.

The processing facility was constructed in 1956 by the Uranium Reduction Company, which operated the facility until 1962 when the property was sold to Atlas. Atlas operated the site until 1984 under a license and regulatory authority provided by the Nuclear Regulatory Commission (NRC) in accordance with Title II of the Uranium Mill Tailings Radiation Control Act (UMTRCA). When the processing operations ceased in 1984, approximately 16 million tons (12 million cubic yards) of uranium tailings or residual radioactive material (RRM) (the term *RRM* is used throughout the PWS to reference the tailings and other contaminated materials from former uranium/vanadium processing) and contaminated soil had been stored in an unlined impoundment located in the northwest portion of the property.

Atlas proposed to reclaim the tailings pile for permanent disposal in its current location. As a result of the Atlas proposal, the NRC developed an *Environmental Impact Statement* (EIS) that focused primarily on on-site reclamation of the mill tailings. Atlas declared bankruptcy in 1998, and in doing so, relinquished its license and forfeited its reclamation bond. Because NRC could not legally possess a site it regulated, NRC appointed PricewaterhouseCoopers as the trustee of the Moab Mill Reclamation Trust and the licensee for the site. The trustee used the forfeited reclamation bond funds to initiate site reclamation, conduct ground water studies, and perform site maintenance activities.

The Floyd D. Spence National Defense Authorization Act for Fiscal Year 2001, Public Law 106-398 (the Act) stipulated that the license issued by NRC for the materials at the Moab Site be terminated and that the title and responsibility for cleanup be transferred to the DOE. Title to the site was transferred to DOE on October 25, 2001. Specifically, the EM Office in Grand Junction, Colorado, now has primary responsibility for the Moab Site. The Moab Uranium Mill Tailings Remedial Action (UMTRA) Project ("Moab Project") is responsible for the remediation of the Moab site, in accordance with surface cleanup standards specified in 40 Code of Federal Regulations (CFR) Part 192, Subpart A – Standards for the Control of Residual Radioactive Materials from Inactive Uranium Processing Sites, Subpart B – Standards for Cleanup of Land and Buildings Contaminated with Residual Radioactive Materials from Inactive Uranium Processing Sites , and Subpart C – Implementation. The Moab Project is subject to 10 CFR 835, OCCUPATIONAL RADIATION PROTECTION.

The Act further designated that the Moab Site undergo remediation in accordance with Title I of the UMTRCA, though certain sections of UMTRCA shall not apply. In accordance with the Act, DOE developed a Draft Plan for Remediation that evaluated DOE's remediation decision-making process and related technical issues. DOE approved the *Final Environmental Impact Statement* (FEIS) on July 25, 2005, which fulfilled the National Environmental Policy Act (NEPA) requirement of considering the full range of reasonable alternatives and associated environmental effects of significant federal actions. The preferred alternative identified in the FEIS included relocation of the tailings and associated wastes to the Crescent Junction off-site waste disposal site using rail transportation as the primary transportation mode, with active ground water remediation. A *Record of Decision* (ROD) identifying the final remedy, consistent with the FEIS preferred alternative, was published on September 14, 2005. An Amended Record of Decision for the Remediation was approved in February 29, 2008. The ROD Amendment increased the flexibility to relocate the residual RRM using rail or truck. In June 2007,

DOE awarded a task order, which required design and installation of waste handling systems, moving RRM from Moab to Crescent Junction site, design and construction of the disposal cell in Crescent Junction, construction and operation of the RRM off-loading facility, and operation of the disposal cell for final disposition of the RRM at Crescent Junction. Subsequent task orders were awarded in 2011 and 2016 to continue the remediation efforts. DOE is conducting ongoing site operations, including RRM excavation, transportation, and disposal and maintenance activities. A project completion date of 2029 has been established based on the current RRM shipment rate of four trains per week. Alternatively, a project completion date of 2034 is projected for an RRM shipment rate of two trains per week.

C.01.2 MOAB PROJECT DESCRIPTION, PURPOSE AND OBJECTIVES

The scope of the Moab Project is to relocate mill tailings, associated wastes, and other contaminated materials from the former uranium-ore processing facility site (presently the Moab Site), and contaminated materials from one off-site vicinity property in Moab, Utah, to a DOE-constructed engineered disposal facility near Crescent Junction, Utah. The scope includes the maintenance of facilities, grounds, and railroad structures at the Moab Site and the Crescent Junction disposal cell, necessary to continue relocation of the mill tailings and associated wastes. The purpose of this contract is the completion of the cleanup of the Moab site and achieving the end-state, including the excavation of the tailings pile, remediation of the contaminated sub-pile below the tailings at the Moab Site, the placement of all RRM in the disposal cell, the final installation of the disposal cell final cover, and restoration of the Crescent Junction site.

The objectives for the Remedial Action Contract (Moab RAC) can be divided into six general categories: (1) Moab operation activities, including RRM excavation and conditioning and filling of intermodal containers, transporting RRM from Moab to Crescent Junction, site maintenance, and reclaiming the Moab site to appropriate standards; (2) Crescent Junction operation activities, including placement and compaction of the RRM, and site maintenance at Crescent Junction and the Green River Pump Station; (3) Construction of interim and final cover at Crescent Junction; (4) Excavation and construction of the remaining cells at Crescent Junction; (5) Remediation of Vicinity Properties, and (6) final site restoration and demobilization at Moab and Crescent Junction while implementing safety, environment, and quality programs to safely and efficiently deliver services in all facets of performing the PWS.

C.02 DESCRIPTION OF PROJECT PERFORMANCE REQUIREMENTS

The Contractor shall:

a. Furnish all personnel, equipment, material, services, utilities such as water, electric, propane, etc. and supplies (except for Government Furnished Services/Items identified in Section J, Attachment 5 and Services Provided by the Technical Assistance Contractor as identified in Section J, Attachment 10) to complete the work requirements outlined in this PWS.
b. Perform services in accordance with applicable Federal laws, State laws, local laws, regulations, executive orders, etc., permits and any other agreements, DOE Directives, and DOE Environmental, Safety and Health, Quality Assurance requirements, and the Remedial Action Plan.
c. Perform all services in accordance with approved safety programs.
d. Complete work on schedule.
e. Receive no Notice of Violation or equivalent letter from DOE identifying a violation of Federal laws, state laws, local laws, regulations and executive orders, etc. permits, other agreements, DOE Environmental, Safety and Health programs, or Quality Assurance requirements.

C.02.1 WORK CONTROLS

The Contractor shall prepare and submit to DOE, for approval, a Contract Work Plan (CWP), which shall provide an integrated system of project management elements (e.g., scope, schedule, and alignment with the Work Breakdown Structure (WBS)) to capture all PWS requirements, for planning, executing, and measuring performance for all PWS requirements during the contract period of performance. See Section H.28, Control/Performance Measurement/ Monthly Reporting, and Section J, Attachment 3, List of Deliverables.

The Contractor shall prepare and submit to DOE, for approval, a Lifecycle Baseline, which shall include technical scope, schedule, and budget, Project Baseline Summary (PBS), WBS definition, dictionary, milestones, and quantitative metrics. The Lifecycle Baseline shall include logic ties and the critical path that demonstrates a comprehensive plan integrating all project activities to efficiently achieve the Project end-state, i.e. all activities are coordinated and sequenced to minimize cost and schedule.

In support of the Moab Project Federal Lifecycle Baseline maintenance, the Contractor shall update the CWP annually throughout the contract performance period. All annual updates to the CWP shall capture any potential contract modifications, progress made to date, and remaining budget and scope required to complete all PWS requirements.

The Contractor shall establish, maintain, and use a Performance Measurement System (PMS) that accurately records and reports the performance against the requirements of the contract, and is consistent with the required Contract Work Plan, and Section J, Attachment 3, List of Deliverables).

C.03 OPERATION OF THE DOE MOAB SITE

C.03.1 MOAB FACILITY/GROUND MAINTENANCE

The Contractor shall maintain the DOE Moab site and provide a Facility/Ground Maintenance Plan that includes the maintenance of all areas, facilities, and structures at the Moab site. See Section J, Attachment 11, Site Maps Including Asphalt Areas, for maps of all areas, facilities and structures for the Moab site. The Contractor shall review the Facility/Ground Maintenance Plan annually or more frequently to document changing site conditions, and submit any updates to DOE for approval.

The Contractor's Facility/Ground Maintenance Plan shall include the Former Atlas Legacy Building, Container Lidding Building, trailers, man-huts, sheds, shacks and other structures that may be occupied or used for storage of equipment and/or materials in the performance of the PWS. The list of buildings/structures at the Moab Site is provided as Section J, Attachment 5, List of Government Furnished Property. See also Section J, Attachment 12, for a list of maintenance requirements and frequency.

As a part of facility/ground maintenance at the DOE Moab site, the Contractor shall:

a. Perform facility inspections, including equipment and/or structures, to assess facility structural integrity in accordance with Section J, Attachment 12.
b. Maintain trailers and trailer staging areas in suitable condition for habitation including utilities until designated otherwise by DOE.
c. Maintain structures to ensure the structural integrity of the building/structure/container envelope to prevent damage to the structure, interior, or equipment from water, wind, extreme temperatures, pests or other factors that would affect the suitability of the intended use.

d. Maintain the non-occupied grounds and areas including site perimeter and staging or other fencing, water systems located at the Moab site, sediment ponds/basins, other ponds and basins, rail and associated structures, haul roads, pedestrian and vehicle access roads, parking lots and staging areas, ditches, underpass, transformers, utility poles and associated utility components. Ensure lighting and signage in all areas, both indoor and outdoor, are maintained in working order. See Section J, Attachment 12, List of Maintenance Requirements and Frequency.
e. Provide grounds maintenance activities. This includes snow removal from personnel walkways and application of clean sand (or other material compatible with the ROD requirements) to prevent slips and falls; grading to prevent minor water accumulation; and haul road and access road maintenance.
f. Provide janitorial services for Moab in all administrative buildings, on a daily basis during the workweek.
   (1) The Contractor shall clean the rest rooms, sweep paved walkways, empty wastebaskets and recycle bins, vacuum, dust, clean windows, and wipe down surfaces.
   (2) The Contractor shall occasionally rake between buildings to maintain an acceptable appearance and to help prevent slips, trips and falls.
   (3) The Contractor shall contact the DOE COR to gain access to the IT server trailers to clean once a week. Section J, Attachment 12 provides a detailed list of the maintenance activities and the schedule of such activities.
g. Implement erosion control methods to control excess water as a result of dewatering activities or storm water runoff, by re-contouring or re-grading, or using temporary soil stabilization techniques that may include erosion control blankets, mulch, or temporary geosynthetic material secured with restrainers such as gravel-filled bags or sand bags, appropriately spaced depending on slope and velocity. Erosion control objectives include:
   (1) Obtaining approval from DOE prior to implementing erosion control methods applied in RRM areas.
   (2) Using clean materials in non-RRM areas with no deleterious components.
h. Repair areas of asphalt at the Moab Site when ruts or degradation becomes obvious.
i. Perform maintenance activities required to sustain all property listed in Section J, Attachment 5, Government Furnished Property and Information List, in a condition suitable for its designed purpose; and
j. Perform preventative, predictive, and minor corrective/repair maintenance on Government provided equipment, intermodal containers, cranes and scales, water tanks, building HVAC systems, and instrumentation provided to accomplish this PWS. See Section J, Attachment 12, List of Maintenance Requirements and Frequency and Section J, Attachment 16, Container Inventory, Inspection, and Maintenance. The Contractor shall disclose to the Contracting Officer (CO) whenever there is a need for replacement and/or rehabilitation of Government Owned Property.
k. The Contractor shall perform hillside monitoring and rockslide mitigation activities, and shall issue daily "go-no go" notifications.

C.03.2 EXCAVATION AND HANDLING AT MOAB

Background:

The tailings impoundment was constructed in the years from 1956 – 1984 using a ring construction method. The tailings were slurried to the impoundment area and then distributed through spigots on the exterior of the pile. The courser-grained material was deposited first creating the perimeter of the tailings impoundment with increasingly finer grained materials remaining suspended in the slurry to form the interior portions of the pile.

The pile tailings material is classified into three types as follows:

- Sand Tailings – less than 30% fines (minus 74 microns)
- Transitional Tailings – greater than 30% and less than 70%
- Slimes Tailings – greater than 70% fines

The Contractor shall perform all excavation activities, including debris, necessary for operating and maintaining the existing waste management and waste handling systems/methods to remove the RRM and other waste. The RRM shall be excavated and transported in a manner and sequence to maximize efficiency of RRM placement and cell construction at Crescent Junction.

In performing these excavation and handling activities at the DOE Moab Site, the Contractor shall:

a. Excavate the RRM tailings pile, covering approximately 120 acres. The original tailings pile was approximately 130 acres.
b. Excavate RRM in the sub-pile, in order to meet the remediation standards of 40 CFR 192, Subpart A and the RAP. The sub-pile is estimated to be 2 feet below the floor (defined by the interface of the lower section of the tailings and upper section of the native undisturbed stratigraphy), and are the tailings that meet 5 or 15 pCi/g as defined in 40 CFR 192, Subpart A.
c. Verify the soil cleanup standards in 40 CFR 192 have been met. The Contractor shall:
    (1) Support independent verification by TAC and/or other outside entity of soil remediation;
    (2) Submit a completion report for each off-pile area to DOE within 60 days after verification sampling is completed;
    (3) Apply "supplemental standards" (40 CFR 192.21) when necessary (e.g., to off-pile area). Such supplemental standards applications shall be approved by DOE and applied accordingly by the Contractor.
d. Transport oversized material (debris) from the Moab site to Crescent Junction using trucks or rail. Within the southwest corner of the tailings pile are the former mill site buildings, facilities and autoclaves. This debris was estimated to be 36,000 cubic yards and composed of steel beams, concrete slabs, concrete blocks, piping, sheet metal, and demolished milling equipment. Some of the debris consists of oversized material. The Contractor shall size and place the oversized debris as specified in the NRC-approved Remedial Action Plan.
e. Excavate 14 autoclaves, transport, and place them in the Crescent Junction disposal cell. The autoclave circuit consists of two parallel banks of seven 8,000-gallon autoclaves in series. They are equipped with mechanical agitators having air spurge lines mounted under the impellers. The first two autoclaves in each bank are equipped with steam coils. The autoclaves on the Moab Site are filled with dirt and asbestos-bearing pipe, and are estimated to weigh approximately 40 tons each. Each autoclave is 12' in diameter and 14 feet tall. See Section J, Attachment 13 for the calculation background. The Contractor shall contain the asbestos-bearing material during transportation.
f. Maintain an Excavation Plan for the Moab site, which includes the details of the planned excavation method, the excavation sequence, mixing of slimes and sands, segregation of oversize materials, and water management. The Contractor shall review the Excavation Plan annually or more frequently to document changing site conditions, and submit any updates to DOE for approval.
    (1) Note that spreading of RRM in contaminated areas of the Moab Project site or conditioning of RRM within the 100 year floodplain shall be conducted ONLY with the prior written approval of the Contracting Officer.
    (2) The Contractor shall not condition RRM on the floor of the tailings pile that has been verified as being remediated without approval of the Contracting Officer.

g. Monitor, track, and document data on tons of RRM excavated, shipped, and disposed, and provide the data to DOE and the TAC on a weekly basis.

C.03.2.1 Waste Management at Moab

The Contractor shall maintain a Waste Management Plan. The Contractor shall review the Waste Management Plan annually, or more frequently, to document changing site conditions, and submit any updates to DOE for approval.

a. The Contractor shall identify, characterize, package, transport and dispose of any waste, including secondary waste.
b. The Contractor shall manage and provide waste management activities. Any waste that requires special handling, such as waste oil and non-RRM, shall be managed in accordance with the Waste Management Plan.

C.03.2.2 RRM Handling at Moab Site

The Contractor shall ensure safe and efficient transfer of RRM in accordance with the ROD. The Contractor is responsible for all aspects of the handling activities at the Moab site (movement of excavation equipment, trucks, container stackers, etc.) in all areas including haul roads, and for all activities taking place at rail sidings. The Contractor shall:

a. Furnish the rail cars to maximize transport of RRM.
b. Operate and maintain the material handling systems at Moab (see Section J, Attachment 12, List of Maintenance Requirements and Frequency – Equipment and Facilities).
c. Load RRM into DOE-furnished containers.
d. Manage and operate container movement.
e. Conduct lidding and de-lidding operations.
f. Decontaminate the outside of the RRM containers according to 10 CFR 835 for transport outside the contaminated area and inspect the containers for RRM.
g. Haul RRM to Moab rail bench, adjacent to Union Pacific Kane Creek Branch Line.
h. Load and unload the containers from the trucks onto rail cars.
i. Inspect the container integrity and placement on the rail cars and inspect rail cars for mechanical issues.
j. Coordinate with Union Pacific for transportation of RRM by rail to Crescent Junction.
k. Minimize the carry back of RRM in containers returning from Crescent Junction.

C.03.2.3 Clean Water Construction Pond and Above-Ground Water Storage Tank at Moab

The Contractor shall operate and maintain the clean water construction pond and above-ground water storage tank at the Moab Site. The Contractor shall use the above-ground storage tank water for dust control within the contamination area at the Moab site. All other dust control shall be performed using water from the clean water construction pond. The TAC will be responsible for all of the equipment and materials that supply the contaminated ground water to the water storage tank.

C.03.2.4 Transportation

a. The Contractor shall, in a safe and compliant manner, transport and dispose of debris, tailings, and other contaminated materials from activities associated with this PWS as RRM at the Crescent Junction disposal cell.
b. The Contractor shall comply with the September 2005 Moab Uranium Mill Tailings ROD, the Amended ROD dated February 2008, and any future amendments to transport materials.
c. The Contractor shall be responsible for entering into arrangements with Union Pacific for the rail transportation of the RRM, using rail cars provided by the Contractor.
d. The Contractor shall be responsible for providing tractors and trailers for conveyance of RRM by truck to Crescent Junction.
e. The Contractor shall maintain a Transportation Plan, which describes modes of transport for various materials, necessary permits, interfaces, and approvals. The Contractor shall review the Transportation Plan annually, or more frequently, to document changing site conditions, and submit any updates to DOE for approval.
f. The Contractor shall, as the operating entity, obtain and maintain all required highway (Utah Department of Transportation) and rail (Union Pacific) transportation permits and agreements for the transport and disposal of RRM on behalf of DOE. See Section J, Attachment 2 for a list of the permits. The highway transportation of RRM shall be in compliance with U.S. Department of Transportation special permit (DOT/SP/14283) for the transportation of radioactive materials.
g. The Contractor shall pay all costs in obtaining the permits, as well as any fines or penalties for non-compliances as a result of its actions.
h. The Contractor shall maintain and repair the rail lines, ties, ballast, switches on the Moab Site and all associated rail loading/unloading facilities, used to transport RRM, within the Federal Railroad Administration (FRA) and Union Pacific specifications

C.03.2.5 Project Support at Moab

The Contractor shall provide ongoing project support necessary for performance of the PWS at the Moab site.

C.03.2.5.1 Regulatory Compliance at Moab

Background:

The Moab Project is regulated by the NRC under Title I of the Uranium Mill Tailings Radiation Control Act of 1978. The state of Utah regulations address related fugitive dust emissions and storm water pollution prevention. The Moab Uranium Mill Tailings ROD, dated September 2005, and the Amended ROD for the Remediation of the Moab Uranium Mill Tailings, Grand and San Juan Counties, Utah, dated February 29, 2008, apply to the Moab activities. The Contractor in the performance of this PWS shall:

a. Comply with these and all other regulatory agreements, laws, and requirements.
b. Obtain and be named as the responsible party on all permits required for excavation and transportation of RRM under this contract (See Section J, Attachment 2, List of Permits and Agreements.)
c. Apply "supplemental standards" (40 CFR 192.21) when necessary (e.g., to off-pile area). Such supplemental standards applications shall be approved by DOE and the NRC

C.03.2.5.2 Site Access Control for Moab

The Contractor shall provide security personnel for the physical security and access control of the Moab site.

C.03.2.5.3 Moab Site Support

The Contractor shall provide support and assistance to DOE for data calls, which occur on average once a month. The Contractor shall provide the following:

a. Information, documentation, and other assistance in responding to issues regarding both sites, such as mineral rights, water rights, Bureau of Land Management (BLM) and Department of Transportation (DOT) processes, and other similar issues that pertain to the Contractor's activities at the sites.
b. Support to public involvement and stakeholder interaction. This occurs on average quarterly or less.
c. Provide personal protective equipment (PPE) (hard hats, safety glasses, and safety vests) as appropriate, for workers, and at least 10% of Contractor owned PPE for DOE and visitors who require access to site areas. DOE and other visitors may require access to site areas an average of twenty-five visits per month.

C.03.2.5.4 Environment, Safety, Health, and Quality at Moab

The Contractor shall maintain and implement an Environmental, Safety, Health and Quality (ESH&Q) Program to ensure protection of the workers, the public, and the environment. As a part of the ESH&Q program, the Contractor shall:

a. Coordinate with the TAC to maintain the Project-wide Health and Safety Plan, and flow-down the requirements to subcontractors.
b. Implement an Emergency Management Program consistent with DOE Order 151.1D Chg1 (MinChg).

C.03.2.5.5 Integrated Safety Management System (ISMS) at Moab

The Contractor shall maintain and implement an ISMS program that complies with the Section I Clause, Integration of Environment, Safety, and Health into Work Planning and Execution, and DOE Order 450.2, Chg 1 (MinChg). As a part of the ISMS program, the Contractor shall:

a. Ensure all work is performed safely and in a compliant manner that assures protection of the workers, public, and the environment.
b. Review the ISMS program annually, or more frequently to document changing site conditions, and submit any updates to DOE for approval.
c. Include a lessons learned program that consists of the following:
   (1) The lessons learned program shall be structured to identify and apply available lessons in safety, quality and performance to this project.
   (2) The lessons learned program shall also capture, document, and provide lessons learned for future application by others.
   (3) The lessons learned for external distribution shall be provided to the TAC for incorporation into the DOE Corporate Lessons Learned Database, when a significant lessons learned event occurs.

C.03.2.5.6 Radiation Protection, Radiological Site Services at Moab

a. The Contractor shall maintain a documented 10 CFR 835 compliant Radiation Protection Program (RPP).

(1) The content of the RPP shall be commensurate with the nature of the activities performed, and include formal plans and measures for applying the as low as reasonably achievable (ALARA) process to occupational exposure.
(2) The Contractor shall review the Radiation Protection Program annually, and provide any updates to DOE for review and approval prior to implementation. Changes that decrease the protectiveness of the program shall not be implemented without DOE approval.

b. The Contractor shall maintain a Radiation Protection Program Manual (RPPM). The manual shall include:
(1) The Moab Project Site Dosimetry Program, which shall provide the distribution, collection, and analysis of personnel external dosimeters for contractor personnel of the RAC and TAC, DOE, and visitors.
(2) The Moab Project Site Internal Dosimetry Program for urine bioassay including the distribution, collection, analysis of bioassay kits for RAC, TAC, and DOE personnel.
(3) The Moab Project Site Instrumentation Program (See Section J, Attachment 5, which lists the Government Furnished Property and Information)
(4) The Moab Project Site Radiological Records Program.

c. The Contractor shall collect, maintain, and report data for:
(1) Worker internal and external dosimetry;
(2) Environmental dosimetry;
(3) Compliance with the required radiological monitoring; and,
(4) Adequacy of site radiological control programs in protecting the health and safety of workers, the public, and the environment.

d. The Contractor shall provide personal protective equipment (PPE) as appropriate, for workers, DOE, and visitors who require access to radiological areas of the Moab and Crescent Junction sites. DOE and other visitors require access on an average of twenty-five visits into the Contamination Area each year.
(1) The Contractor shall launder the radiological PPE including:
A. the coveralls worn by personnel who work in the Contaminated Area three times each work day;
B. the coveralls worn by personnel working in the Queue area and at the Crescent Junction disposal facility one time each work day;
C. additionally, the safety vests worn by TAC personnel as requested.
(2) Once washed and dried, PPE shall be scanned out and free-released on a sample basis—one item in every three or four.
(3) Any PPE needing repairs shall be disposed of.

C.03.2.5.7 Industrial Hygiene at Moab

a. The Contractor shall maintain a 10 CFR 851 compliant Health and Safety Plan (HASP) for the hazards applicable to this PWS.
b. The Contractor shall review the HASP annually, or more frequently, to document changing site conditions, and submit any updates to DOE for approval. The Contractor shall inform DOE in writing that there are no changes in the currently approved program.
c. The Contractor shall ensure integration of the Health and Safety Program with all other related site-specific worker protection activities and include it as part of the Integrated Safety Management System.
d. The Contractor's Health and Safety Program shall include qualified safety and health staff, worker rights, hazard identification, hazard prevention and abatement, training and information, recordkeeping and reporting.
e. The Contractor shall provide medical monitoring for workers and DOE staff compliant with 10 CFR 851.

C.03.2.5.8 Quality Assurance/Quality Control at Moab

a. The Contractor shall maintain a DOE-approved Quality Assurance program (QAP) in accordance with EM-QA-001, Rev. 1, *Environmental Management Quality Assurance Program.*
b. The Contractor's QAP shall address all aspects of operations including environment, safety, and health; safeguards and security; emergency management; and business operations.
   (1) The Contractor shall review the QAP annually, or more frequently, to document changing site conditions, and submit any updates to DOE for approval.
   (2) The Contractor shall inform DOE in writing that there are no changes in the currently approved program.
c. The Contractor shall provide the QAP, and any subsequent changes, to the TAC for incorporation into the overall Moab Project Quality Assurance Program.
d. The Contractor shall implement a Contractor Assurance System, Incident Reporting, Tracking, and Corrective Action program.
e. The Contractor shall perform Quality Assurance Independent Assessments and Surveillances, and allow the TAC and DOE personnel access for performance of oversight activities.
f. The Contractor shall provide a licensed Professional Engineer as the Design Authority to review and approve design modifications or changes in accordance with the RAP and NQA-1.
g. The Contractor shall allow DOE, regulators, and the TAC to perform announced and unannounced oversight activities. The Contractor shall accommodate visits by interested stakeholders.
h. Unplanned events, such as serious incidents, will result in greater levels and frequencies of oversight from DOE, the TAC, or regulators, which the Contractor shall accommodate.

C.03.2.5.9 Records Management

Records generated under this PWS are the property of DOE. The Contractor shall:

a. Manage these records in accordance with the Records Management Plan developed by the TAC.
b. Comply with the requirements for managing records in all formats, including early capture and control throughout their lifecycle in accordance with DOE Order 243.1B Chg 1 (Admin Chg), Records Management Program.
c. Provide to the TAC all official records that are in its possession on a monthly basis; however, retain certain informational copies of records necessary to perform the PWS.
d. Support the TAC in meeting DOE compliance with the Freedom of Information Act (FOIA), Energy Employees Occupational Illness Compensation Program Act of 2000 (EEOICPA), and litigation discovery efforts.

C.03.2.6.0 Interagency Fleet Management System (IFMS) Vehicles

IFMS vehicle costs shall be a reimbursable cost under this section in accordance with FAR Subpart 51.2, "Contractor Use of IFMS Vehicles" and FAR 52.251-2 "Interagency Fleet Management System Vehicles and Related Services" (see Section I, clause I.133).

C.04 OPERATION OF THE DOE CRESCENT JUNCTION SITE

C.04.1 FACILITY/GROUND MAINTENANCE

The Contractor's Facility/Ground Maintenance plan shall include trailers, man-huts, sheds, shacks and other structures that may be occupied or used for storage of equipment and/or materials at the Crescent Junction site in the performance of the PWS. The list of buildings/structures at the Crescent Junction Site is provided at Section J, Attachment 5, List of Government Furnished Property. See also Section J, Attachment 12, for a maintenance schedule.

The Contractor shall:

a. Perform facility inspections, including equipment and/or structures, to assess facility structural integrity in accordance with Section J, Attachment 12.
b. Maintain trailers and trailer staging areas in suitable condition for habitation including utilities until designated otherwise by DOE.
c. Maintain structures to ensure the structural integrity of the building/structure/ container envelope to prevent damage to the structure, interior, or equipment from water, wind, extreme temperatures, pests or other that would affect the suitability of the intended use.
d. Maintain the non-occupied grounds and areas including site perimeter and staging or other fencing, water systems located at the Crescent Junction site, sediment ponds/basins, other ponds and basins, rail and associated structures, haul roads, pedestrian and vehicle access roads, parking lots and staging areas, ditches, underpass, transformers, utility poles and associated utility components. Ensure lighting and signage in all areas, both indoor and outdoor, are maintained in working order. See Section J, Attachment 12, List of Maintenance Requirements and Frequency.
e. Provide grounds maintenance activities. This includes snow removal from personnel walkways and application of clean sand (or other material compatible with the ROD requirements) to prevent slips and falls, grading to prevent minor water accumulation, and haul road and access road maintenance.
f. Perform janitorial services for the Crescent Junction site in all administrative buildings, on a twice-weekly basis during the workweek.
   (1) The Contractor shall clean the rest rooms, sweep paved walkways, empty wastebaskets and recycle bins, vacuum, dust, clean windows, and wipe down surfaces.
   (2) The Contractor shall occasionally rake between buildings to maintain an acceptable appearance and to help prevent slips, trips and falls.
g. Implement erosion control methods to control excess water as a result of dewatering activities or storm water runoff, by re-contouring or re-grading, or using temporary soil stabilization techniques that may include erosion control blankets, mulch, or temporary geosynthetic material secured with restrainers such as gravel-filled bags or sand bags, appropriately spaced depending on slope and velocity. Erosion control objectives include:
   (1) Obtaining approval from DOE prior to implementing erosion control methods applied in RRM areas.
   (2) Using clean materials in non-RRM areas with no deleterious components.
h. Repair areas of asphalt at the Crescent Junction site when ruts or degradation becomes obvious.
i. Perform maintenance activities required to sustain all property listed in Section J, Attachment 5, Government Furnished Property list, in a condition suitable for its designed purpose.
j. Perform preventative, predictive, and minor corrective/repair maintenance on Government provided equipment, cranes and scales, water tanks, building HVAC systems, and instrumentation provided to accomplish this PWS. See Section J, Attachment 12, List of Maintenance Requirements and Frequency. The Contractor shall disclose to the Contracting Officer (CO) whenever there is a need for replacement and/or rehabilitation of Government Owned Property.
k. The Contractor shall maintain and repair the rail lines, ties, ballast, switches on the Crescent Junction Site and all associated rail loading/unloading facilities, used to transport RRM, within the Federal Railroad Administration (FRA) and Union Pacific specifications.

C.04.2 DISPOSAL CELL PLACEMENT AND COMPACTION

The Contractor shall conduct all disposal cell operations at Crescent Junction in accordance with the Final Remedial Action Plan (RAP), approved by the NRC. The Contractor shall submit to DOE an annual Interim Completion Report on RRM disposed.

a. In performing disposal placement and compaction activities, the Contractor shall:
   (1) Prepare and dispose of all RRM wastes generated from remedial action under this PWS. This includes placement and compaction of RRM in accordance with the RAP**.**
   (2) Minimize the stockpiling of the RRM at Crescent Junction.
   (3) Manage the RRM moisture content to achieve the RRM placement criteria, as specified in the RAP and the Remedial Action Inspection Plan.
   (4) Install and maintain standpipes per the RAP.
b. Debris Placement - debris shall be placed in a single layer (no nesting) and compacted, then covered with a layer of RRM, as specified in the NRC-approved Remedial Action Inspection Plan. See Section C.03.2.d above for a description of debris, in accordance with the Remedial Action Inspection Plan.
c. Asbestos autoclaves – the Contractor shall place 14 autoclaves in the Crescent Junction disposal cell. See Section C.03.2.e under the Moab section for a description of the autoclaves. The Contractor shall:
   (1) Coordinate with DOE, in providing information for DOE to submit a request to the NRC for a waiver to the Remedial Action Inspection Plan requirements for sizing material to be placed in the disposal cell, prior to excavating and transporting the autoclaves.
   (2) Unload the autoclaves.
   (3) When the autoclaves are delivered to the Crescent Junction disposal cell, they must be filled with DOE-approved (with NRC consent) flowable fill so that no voids exist in the vessels.
d. The Contractor shall coordinate and operate all the related waste excavation, transport, loading/unloading and placement equipment provided by the Government listed in Section J, Attachment 5, List of Government Furnished Property, and supplemented by the Contractor personal equipment, on the haul road, the disposal cell, and the rail facility to accomplish disposal of the waste.
e. The Contractor shall operate and maintain (O&M) the existing Construction Water System.
   (1) The Construction Water System includes: two Green River pumps and pump enclosures; one settling pond, fencing, and electrical; four booster pumps with diesel generators and pump enclosures; a 21-mile long pipeline from the Green River pump station to the construction water pond at Crescent Junction; and, one gravity drain fill station.
   (2) The Contractor shall fuel all diesel generators to ensure they continue to provide power for the booster pumps.
   (3) The Contractor shall remove sediment from the Green River sediment pond annually, unless determined in coordination with DOE that such removal is not required. See Section J, Attachment 11, for a map of the waterline and associated equipment.
   (4) The Contractor shall use water from the construction water pond at Crescent Junction for:
      (a) dust control, compaction; and,
      (b) any other activities at Crescent Junction requiring non-potable water.

C.04.3 WASTE MANAGEMENT AT CRESCENT JUNCTION

The Contractor shall maintain a Waste Management Plan. Refer to Section C.03.2.1 above—DOE expects the Contractor to have one plan that covers both sites, but describes the differences at each site.

C.04.4 DISPOSAL CELL INTERIM AND FINAL COVER

a. The Contractor shall construct interim and final covers for the disposal cell, according to the specifications in the approved RAP and subsequent RAP modifications.
b. The Contractor shall ensure that the interim cover is kept free of vegetation or organic material.
c. Any proposed changes to disposal cover materials (i.e., material source selection) must meet the RAP requirements and must have Design Authority and DOE approval prior to implementation.

C.04.5 CELL EXCAVATION AND CONSTRUCTION

The Contractor shall excavate and construct the remaining disposal cells as specified in the approved RAP. Any proposed changes to cell design must meet the RAP requirements and must have Design Authority and DOE approval prior to implementation.

C.04.6 PROJECT SUPPORT AT CRESCENT JUNCTION

The Contractor shall provide all ongoing project support necessary for performance of this PWS at the Crescent Junction site.

C.04.6.1 Regulatory Compliance at Crescent Junction

Background:

The Moab Project is regulated by the NRC under Title I of the Uranium Mill Tailings Radiation Control Act of 1978. The Moab Uranium Mill Tailings ROD, dated September 2005, and the Amended Record of Decision for the Remediation of the Moab Uranium Mill Tailings, Grand and San Juan Counties, Utah, dated February 29, 2008, apply to the Crescent Junction activities. The Final Remedial Action Plan (RAP), approved in August 2008, applies to the Crescent Junction disposal cell and placement of RRM. The Contractor, in the performance of this PWS shall:

a. Comply with all regulatory agreements, laws, and requirements in the conduct of its activity under this PWS.
b. Be responsible for obtaining and being named as the responsible party on permits required for disposal of RRM under this PWS (See Section J, Attachment 2.)

C.04.6.2 Site Access Control for Crescent Junction

a. The Contractor shall provide security personnel for the physical security and access control of the Crescent Junction site.
b. The Contractor shall provide controls for access to identified radiologically contaminated areas by using marked boundaries and, if necessary, adjust the boundaries as the work progresses.

C.04.6.3 Crescent Junction Site Support

The Contractor shall provide support and assistance to DOE for data calls, which occur on average about once a month. The Contractor shall provide the following:

a. Information, documentation, and other assistance in responding to issues regarding both sites, such as mineral rights, water rights, Bureau of Land Management (BLM) and Department of Transportation (DOT) processes, and other similar issues that pertain to the Contractor's activities at the sites.
b. Support to public involvement and stakeholder interaction. This occurs on average quarterly or less.

c. Personal protective equipment (PPE – hard hats, safety glasses, and safety vests) as appropriate, for workers, DOE, and visitors who require access to site areas. DOE and other visitors may require access to site areas an average of twenty-five visits per month.

C.04.6.4 Environment, Safety, Health, and Quality at Crescent Junction

The Contractor shall maintain and implement an ESH&Q Program to ensure protection of the workers, the public, and the environment. Refer to Section C.03.2.5.4 above—DOE expects the Contractor to have one program that covers both sites, but differentiates between the application of the ESH&Q Program at each site.

C.04.6.5 Integrated Safety Management System (ISMS) at Crescent Junction

The Contractor shall maintain and implement an ISMS program that complies with the Section I Clause, Integration of Environment, Safety, and Health into Work Planning and Execution, and DOE Order 450.2, Chg 1 (MinChg). Refer to Section C.03.2.5.5 above—DOE expects the Contractor to have one program that covers both sites, but differentiates between the application of the ISMS Program at each site.

C.04.6.6 Radiation Protection, Radiological Site Services at Crescent Junction

a. The Contractor shall maintain a documented 10 CFR 835 compliant Radiation Protection Program (RPP). Refer to Section C.03.2.5.6 above. The DOE expects the Contractor to have one program that covers both sites, but differentiates between the application of the RPP at each site.
b. The Contractor shall maintain a Radiation Protection Program Manual (RPPM). Refer to Section C.03.2.5.6 above. The DOE expects the Contractor to have one program that covers both sites, but differentiates between the application of the RPPM at each site.

C.04.6.7 Industrial Hygiene at Crescent Junction

The Contractor shall maintain their 10 CFR 851 compliant Worker Health and Safety Program for the hazards applicable to the Contractor's scope of work. Refer to Section C.03.2.5.7 above —DOE expects the Contractor to have one program that covers both sites, but differentiates between the application of the Worker Health and Safety Program at each site.

C.04.6.8 Quality Assurance/Quality Control at Crescent Junction

The Contractor shall maintain a DOE-approved Quality Assurance program (QAP) in accordance with EM-QA-001, Rev. 1, *Environmental Management Quality Assurance Program,* and (ASME) NQA-1, 2008 *Quality Assurance Requirements for Nuclear Facility Applications*, including addenda through 2009. Refer to Section C.03.2.5.8 above under the Moab section—DOE expects the Contractor to have one program that covers both sites, but differentiates between the application of the QAP at each site.

C.04.6.9 Records Management at Crescent Junction

Refer to Section C.03.2.5.9 above under the Moab section. The DOE expects the Contractor to manage records at Crescent Junction as it does at the Moab Site.

C.04.7.0 Interagency Fleet Management System (IFMS) Vehicles

IFMS vehicle costs shall be a reimbursable cost under this section in accordance with FAR Subpart 51.2, "Contractor Use of IFMS Vehicles" and FAR 52.251-2 "Interagency Fleet Management System Vehicles and Related Services" (see Section I, clause I.133).

C.05 VICINITY PROPERTIES

Vicinity Properties (VPs) are separate from the former Atlas mill-processing site (Moab Site) or the Crescent Junction disposal site and are located in the local Moab community. VPs became contaminated when RRM, originating from the former mill site, was placed/transported to these properties through past activities. The property described below is the only currently known remaining VP for the Moab Project.

VP 137 (Bert's Auto Site): The Contractor shall remediate materials at Bert's Auto site, located south of the city of Moab, about 8 miles from the Moab UMTRA site. Materials identified at the Bert's Auto site requiring remediation include contaminated materials and any identified contaminated soils near the contaminated materials. The Contractor shall remove these contaminated materials and transport them to the Moab site for management with the RRM onsite.